

A New Look at *Squatting* PART II

BY KIM GOSS



Melanie Roach is a mother-of-three who placed 12th at the 2007 World Weightlifting Championships with a 6-for-6 performance that included a 174-pound snatch and a 242-pound clean and jerk. In training Melanie has done a front squat of 292 pounds and a back squat of 352 pounds.

Photo by Bruce Klemens

The ultimate warm-up for lifting max weights safely in the squat

STOP READING THIS if you are a recreational lifter with no particular goals. If all you want is to get in a few sets of light squats once or twice a week, then this article may not be for you. Or if you are a high school coach who has to pack a lot of kids into a weightroom and get them in and out quickly, this article may not be for you either. But for anyone who wants to experience the best, and safest, method for preparing to perform the squat, read on.

At BFS, the way we recommend warming up for a workout is to perform the Dot Drill and then perform several sets of lifts with lighter weights before working on smashing your personal records. In the high school environment, this is the most practical way to warm up, and it has proven effective in thousands of schools in hundreds of thousands of workouts for over 30 years. It gets solid, reliable results every time. If “reliable” sounds a little lukewarm for your purposes, you might be ready for the granddaddy of all warm-ups: Dr. Guy Voyer’s Squat Warm-up.

As discussed in Part I of this series, Dr. Voyer believes that you should not simply start squatting during a workout. It is critical to prepare the body for the exercise with a warm-up that fulfills three goals: cardio-respiratory heating, articular awakening and muscular demands. (Refer to Part I for the theory of these three variables.) Part II will describe, step-by-step, the actual warm-up program.

The Ultimate Squat Warm-up

Dr. Voyer’s Squat Warm-up con-

sists of 13 exercises. Consider them steps that will get you ready for maximum performance. The first exercise is the primary cardiorespiratory warm-up, but it can be preceded by a short warm-up on a stationary bike or elliptical cycle. Its primary purpose is simply to increase your breathing rate for a few minutes and to elevate your body temperature.

Exercises 2-12 are technically referred to as the osteoarticular warm-up, which means each is designed to warm up a specific joint.

Unlike most warm-ups, these exercises require the use of a light barbell with a resistance of 10 percent of an individual’s bodyweight for beginners and up to 25 percent bodyweight for advanced. You should not use a belt on any of these exercises, as it could affect your ability to properly perform some of these movements. The squat is a strenuous exercise, and the use of resistance in this warm-up more adequately prepares the joints for such stress. [As a reminder, “proprioceptors” are simply sensory receptors that provide body awareness and are excited by such stimuli as changes in limb position.]

The final exercise is the actual squat, and this is considered the muscular solicitation phase of the warm-up. From here the athlete is ready to begin the regular squat workout.

It is extremely important to perform the exercises in this exact order and not to skip an exercise, as each exercise “builds” upon the previous one. If you have recently recovered from an injury, then you might perform a few extra reps

for the exercise that works a specific joint. For example, if you have had previous injuries to an ACL or MCL, you could perform 5-10 extra reps on exercises 4 and 5.

Dr. Guy Voyer’s squat warm-up emphasizes safety through proper preparation of all aspects of the squat, so it is ideal for elite athletes who want to take all the necessary precautions to avoid injury in the weightroom. It is also ideal for older athletes, especially those with a history of injuries. It’s simply a great warm-up for everybody!

And for those of you who think this warm-up seems easy, it can be quite a challenge, especially when you progress to the level where you can use 25 percent of your bodyweight on the barbell. But the bottom line is that after you’ve gone through all 13 exercises in Dr. Guy Voyer’s Squat Warm-up, you’ll be ready to make some powerful progress with your squat!



(For more information about Dr. Guy Voyer’s accomplishments and upcoming seminars, please visit www.AmericanInstituteofAppliedSomaTraining.com and www.guyvoyer.com.)



1. STATIONARY MARCH

The stationary march is a simple, low-impact exercise to stimulate the cardiorespiratory system by raising body temperature and respiration. It is performed by simply walking in place, lifting the heels but without lifting the foot off the floor. It should be performed at a slow-to-medium cadence for 1-3 minutes.



2. ANKLE INVERSION/EVERSION

These two movements are used to wake up, or stimulate, the proprioceptors of the ankle in inversion and eversion. Rotate to the outside edge of the ankles for 20 reps, then rotate to the inside edge of the ankles for 20 reps. The motion is relatively small (with the edges of the foot just clearing the floor), as you do not want to risk turning your ankles and causing injury.



3. SINGLE-LEG BALANCE

This exercise is designed to wake up the proprioceptors of the ankle in flexion and extension. Simply lift the heel as high off the floor as possible without lifting the toes off the floor, and then return the heel to flat. Then lift the toes off the ground as high as possible without lifting the heel off the ground. Alternate between feet. Perform 20 reps for each side.



4. KNEE CIRCLES

Here is a specific exercise to stimulate the proprioceptors of the knee, thereby preparing the knee ligaments for squatting. With the feet together, bend your knees 15-20 degrees, making 20 small circles clockwise and then counterclockwise.



5. FIGURE 8

This works the same knee proprioceptors and ligaments as in exercise 4, but in a slightly different manner. With your feet and knees together, start by bending your knees 15-20 degrees and then perform a figure 8 pattern as you vertically descend and then ascend to the start position. Perform 15 reps by starting the figure 8 pattern in a clockwise direction, and then perform 15 reps by starting in a counterclockwise direction.

6. HIP FLEXION AND EXTENSION

This exercise works the proprioceptors of the hip in flexion and extension. Lift one leg (to parallel if possible), bending at the knee, and then lower the leg to the ground. Perform for 15 reps and then repeat for the other leg. There is no rotation of the lower leg, except for whatever happens biomechanically.



7. EXTERNAL AND INTERNAL HIP ROTATION

As with exercise 6, this exercise also works the proprioceptors of the hip, but this time with external and internal rotation. Lift one leg (to parallel if possible), bending at the knee, and then rotate the lower leg outward and then inward. Perform 15 reps and then repeat for the other leg.



8. LEG CROSSOVERS

This exercise works the proprioceptors of the hip using abduction and adduction of the leg. Bend the supporting leg slightly, and then swing the other leg laterally in front and then behind. Perform 15 reps for each leg. Be careful not to swing your leg too far away from your body, as it can be difficult to maintain your balance at first.



9. SPINE TRANSLATION

This is designed to wake up the proprioceptors of the spine in what is known as lateral translation. Keeping the legs straight, pelvis tucked under, and without lifting the heels off the floor, move the spine laterally (to the right and then left). Beginners may slightly (1/4 inch or less) lift each hip independently while concentrating on moving the spine laterally in relation to the pelvis, which should remain stationary. Care should be taken to perform this exercise with a focus on lateral movement of the spine in a very small (less than an inch for beginners) range of motion. Perform 15 reps each direction.



10. SIDE BEND

The side bend is another exercise designed to wake up the proprioceptors of the spine in side bending. Keeping the legs straight, bend sideways as far as comfortable. For balance, you will have to shift your hips slightly in the opposite direction. Perform 15 reps each direction.



11. GOOD MORNING

This is designed to wake up the proprioceptors of the spine in extension and flexion. Bend forward from the hip until your back is almost parallel to the floor, and then return to the start by reversing the motion – do not allow excessive rounding of your lower back. Perform 15 reps. Regarding the head position, beginners should perform it with their head in a neutral position and through a short range of motion to prevent rounding the lower back; advanced trainees with good body awareness (and no history of back pain) can perform the exercise with the head looking down at the finish.



12. ELBOW TO KNEE

This step is designed to wake up the proprioceptors of the spine with simultaneous flexion and rotation. Dr. Voyer refers to this activity as “positive torsion.” Bend forward and twist so that the right elbow touches the left knee (or gets close); then repeat for the other side for 15 reps each direction.



13. MUSCULAR SOLICITATION

For a muscular warm-up for all the muscles specifically used in the squat, simply perform a full squat for 15 reps.



To read Part I of this article, which appeared in our Sep/Oct 07 issue, go to the magazine archive section of our website:
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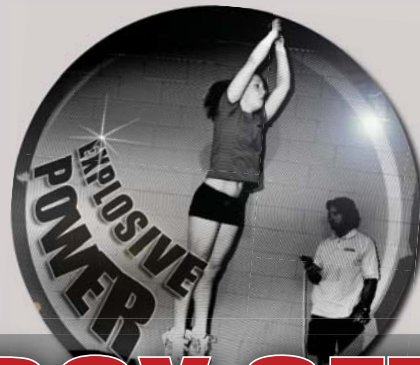
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